CLAIMS

1. A method for controlling a crane, the method comprising giving velocity requests as control sequences (10) from a crane (1) control system (9) to crane drives (11, 12) and reading and storing the velocity requests (V_{ref}) in a control system, whereby

each velocity request (V_{ref}) is compared with the previous velocity request and, if the velocity request is changed, an acceleration sequence for the corresponding velocity change is formed and stored, after which, irrespective of whether the velocity request has changed,

summing the velocity changes defined by the stored acceleration sequences at a given time and adding the obtained sum (dV) to the previous velocity request to achieve a new velocity request (V_{ref2}), which is set as a new control and velocity request for the crane drives (11, 12), and

performing some of the velocity changes defined by the summed acceleration sequences at the definition time of each sequence and performing the rest of them as delayed,

characterized by defining, at each time, the distance (s) the crane moves before stopping and without swinging of the load (8) fastened to it by summing up the following calculations:

a) Stopping distance (s_1), which is calculated on the basis of the internal target velocity, i.e. the velocity which the control of the algorithm implementing this has after the stored velocity changes are entirely implemented, by using the selected deceleration ramp, and

b) distance (s_2), which is calculated on the basis of stored velocity change requests stated before the stopping decision and on the basis of remaining performance times.

2. A method as claimed in claim 1, **characterized** in that when decelerating the target velocity of point a), the distance (s_3) caused by preventing the load (8) from swinging, calculated on the basis of the part of the velocity control that differs from the deceleration ramp and being travelled by the crane when the swinging of the load caused by the actual deceleration ramp is damped with this differing velocity control is added to the calculation result.

3. A method as claimed in claim 1 or 2, **characterized** by placing the storages in a two-element table, whereby the velocity change

which is to be carried out after a certain oscillation time is stored in the first element and the time, after which the velocity change or changes of the first element are carried out, is stored in the second element.